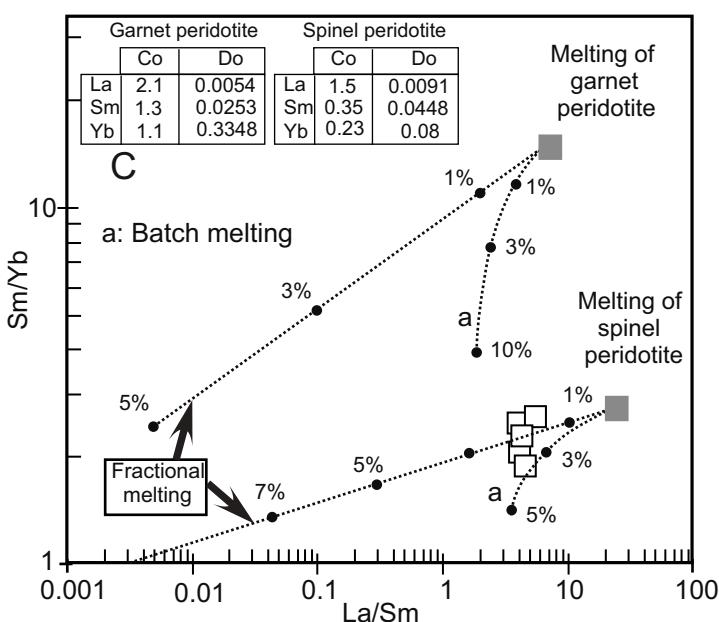
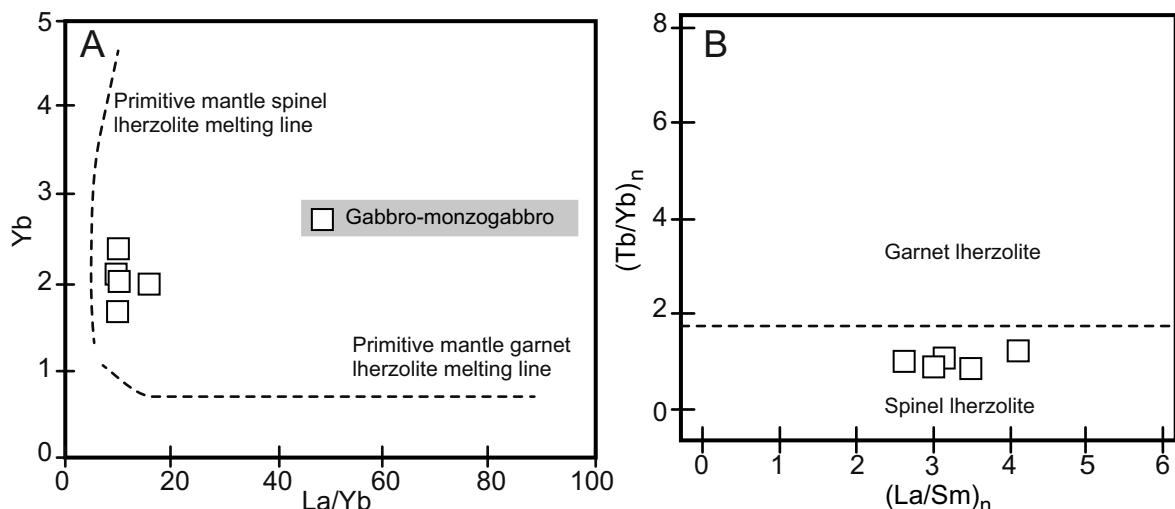


## APPENDIX 5

### Diagrams to determine the source rock and melting depth of the Arbat gabbro-monzogabbro intrusions



**A** – Yb (ppm) vs. La/Yb ratio to distinguish garnet and spinel bearing mantle source (Peters et al., 2008);

**B** – normalized Tb/Yb vs. La/Sm ratios to distinguish garnet and spinel bearing mantle source (Wang et al., 2002);

**C** – La/Sm vs. Sm/Yb plot (Keskin, 2005) showing theoretical melting curves plotted along with the gabbro-monzogabbro samples from the Arbat intrusions; fractional and batch melting equations of Shaw (1970) were used to construct the melting model; numbers along these lines represent the degree of the fractional crystallization (for more information, see Keskin, 2005)